



Field Activity Advisory

San Joaquin River Juvenile Salmon Trap and Transport Study

February 1 – May 31, 2016

This notice is to inform the public of an upcoming research study to trap and transport juvenile fall-run Chinook salmon from the Fresno area to the downstream end of the San Joaquin River (SJR) Restoration Area.

The Program translocated adult fall-run Chinook salmon into Reach 1 of the Restoration Area to study spawning and rearing activities. Offspring of these salmon are currently in the river and provide a unique opportunity to study the response of these fish to current river conditions. River conditions remain largely impassable downstream and are not conducive to juvenile salmon survival, therefore a trap and haul effort is being performed to transport fish downstream of these obstacles. The effort will evaluate the feasibility of implementing similar temporary actions in the future, and monitor fish movements in certain areas of the SJR during dry hydrologic water-year types, where no flow pulses are available to cue juvenile salmon to downstream migration under low water conditions and impossible for fish to emigrate under their own volition.

Who: Bureau of Reclamation.

What: The capture and transport of juvenile Chinook salmon in low flow years when the SJR may not be contiguous throughout the Restoration Area or when downstream barriers to outmigration exist. In the fall 2015, 891 adult fall-run Chinook salmon were translocated to Reach 1 of the SJR and more than 202 spawning redds (nests where eggs were laid) were documented. The successful outmigration of juvenile salmon is critical for survival to adulthood and to support the goal of the Restoration Program to restore Chinook salmon to the SJR. Factors determining successful outmigration include suitable water temperatures, adequate and timely flow for downstream movement, and a passable watercourse, none of which are available in some reaches of the Restoration Area due to low flow water conditions. If successful, similar actions could be used in the future with juvenile salmon when flows limit the connectivity of the river.



Photo: 2015 Juvenile Fish Collection Weir.

To capture fish, temporary fence weirs will be installed at three locations on the San Joaquin River from Highway 41 to downstream of Highway 145 Bridge. The fence weirs would be constructed from bank to bank, using wire mesh panels and supporting metal posts leading to a collection box. Fish would enter the collection box through a V-shaped passageway that inhibits exit. Restrictive bars at the collection box entrance would allow smaller fish to enter and block larger fish (i.e., predators).

Temporary fish collection structures will include flashing safety lights and flagging to alert boaters. As appropriate, temporary fence weirs will include boat passage with bright paint and signage to direct boaters.

Collection boxes will be checked for fish and weirs cleaned of debris daily. Subsequently, fish will be collected from all sites and transported to the downstream release site.

When: Juvenile fall-run Chinook salmon trap and haul activities will occur from February 1 through May 31, 2016, depending on hydrologic conditions. Following completion of the study, fish collection structures will be removed. In the event of high river flows or potential flooding, the fish weirs will be removed before the study is complete.

Where: Sampling locations are within Reach 1 of the San Joaquin River Restoration Area from Highway 41 to downstream of Highway 145.

Considerations: Access to the locations will occur from the public right-of-way or in areas where private landowners have granted access.



Photo: 2015 Boat Passage on Fish Collection Weir



Photo: Juvenile Chinook salmon.

Questions about this activity should be directed to the study's agency points-of-contact using the information provided below.

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Questions about the SJRRP's field activities on public and private land should be directed to the SJRRP Landowner Coordinator using the information provided below.

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For more information, please visit the SJRRP Web site at www.restoresjr.net.